(19) World Intellectual Property Organization

International Bureau





(43) International Publication Date 11 August 2005 (11.08.2005)

PCT

(10) International Publication Number WO 2005/072515 A1

(51) International Patent Classification7: 5/00, 5/10, C12N 5/04

A01H 1/00,

(21) International Application Number:

PCT/IL2004/000087

(22) International Filing Date: 29 January 2004 (29.01.2004)

(25) Filing Language:

English

(26) Publication Language:

English

- (71) Applicants (for all designated States except US): HAZ-ERA GENETICS LTD. [IL/IL]; Brurim, 79837 M.P. Shikmim (IL). LYCORED NATURAL PRODUCTS INDUSTRIES LTD. [IL/IL]; P.O. Box 320, 84102 Beer Sheva (IL).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): PELEG, Ezri [IL/IL]; Kibbutz Bait Kama, 85325 M.P. Negev (IL). VARDI, Eyal [IL/IL]; 4 Hagali Street, 76601 Rehovot (IL).
- (74) Agent: WEBB, Cynthia; Webb & Associates, P.O. Box 2189, 76121 Rehovot (IL).

- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

- with international search report
- with amended claims and statement

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: HIGH LYCOPENE TOMATO VARIETIES AND USE THEREOF

(57) Abstract: The present invention relates to hardy tomato (Lycopersicon esculentum) varieties, homozygous for the dark green (dg) gene, producing fruit comprising an average lycopene content at least two fold its content in fruit of currently available commercial tomato varieties, wherein the varieties are adapted for growth on a commercial scale and the fruit crop maintains the average high lycopene content. The present invention further relates to the use of said varieties for the production of tomatoes for the fresh and processed fruit markets as well as for the production of lycopene and products comprising same.

